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Transporting the Binge-watching Television Audiences: A Look at the Effects of Genre Schema and Narrative Relevance on the Flow Experience

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Transporting the Binge-watching Television Audiences: A Look at the Effects of Genre Schema and Narrative Relevance on the Flow Experience

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Abstract

Transporting the Binge-watching Television Audiences: A Look at the Effects of Genre Schema and Narrative Relevance on the Flow Experience

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This study proposes flow construct in binge watching is defined in terms of the experience (i.e. media enjoyment and high narrative transportation), structural properties of the flow activity (viewing plan, the interactivity with the video streaming services), and the antecedents of flow such as preexisting genre schema. Using an online survey, this study finds that (a) preexisting genre schema is significantly and positively related to flow experience in binge watching, (b) there is a significant interaction between preexisting genre schema and perceived realism to predict binge watchers' flow experience, and (c) when binge watchers' have higher perceptions of reality of narrative content, the flow experience varies, whereas when the binge watchers have low or medium perceived realism, the flow experience doesn't vary. Theoretical and practical implications are discussed.

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Chapter 1: Introduction

When Netflix releases an entire season of a program, an enormous percentage of Netflix subscribers watch back-to-back episodes and consume the whole season of content within a few days (Matrix, 2014). Nearly half of US consumers subscribe to a streaming video service, and among these subscribers, 61% value their streaming video service among their top three subscription services (Deloitte, 2016). Advancements in streaming media technology have significantly impacted and reshaped the current media consumption behaviors of US consumers (Deloitte, 2016; Sung, Kang, & Lee, 2018). Millennials spend more time watching streaming video content than live TV (Deloitte, 2016), and 76% subscribers agree that watching multiple episodes of their favorite TV shows is a welcome refuge from their busy lives (Harris, 2013). According to the Deloitte Democracy Survey (2016), consumers are watching an average of five episodes in a single sitting. This emerging nationwide pattern of media consumption has garnered scholars' attention, and it is defined as binge-watching (Eastin et al. 2018).

Binge watching refers to the practice of watching multiple episodes of a TV show back-to-back in one sitting (Harris Interactive, 2013; Riddle, Peebles, Davis, Xu, & Schroeder, 2017; Sung et al., 2015; Eastin et al. 2018). While there is no consensus on how many episodes would constitute a binge (Riddle et al., 2017; Sung et al., 2018), Nielsen (2013) defines binging as watching more than three episodes of the same show in one sitting. According to the Harris Interactive survey (2013), 71% of respondents define a binge as watching between two and six episodes of the same show in one sitting.

However, Feeney (2014) pointed out that definitions based on a minimum number of episodes do not distinguish between hour-long dramas and shorter sitcoms. Instead of focusing on the number of episodes in one sitting, Eastin and colleagues (2018) define binge as watching a number of episodes that exceeds the normal number of episodes one would watch in one sitting. This definition is dependent on the determination of "norm" and "excess" viewing behaviors, but "norms" and "excesses" are difficult to pin down in the context of individualized viewing behavior (Jenner, 2015). Therefore, by incorporating the conceptual definitions from previous studies and operational definitions of binge drinking and binge eating, Sung et al. (2018) provided an expanded definition of binge watching that include four dimensions: the number of episodes, the amount of time spent watching programs, frequency, and the level of engagement in the programs.

Previous binge watching studies share a noticeable similarity: many begin by associating binge watching with other acts of excessive or compulsive consumption, such as binge eating and drinking (Eastin et al. 2018; Riddle et al., 2017; Sung et al., 2018). Following this frame, scholars and popular writers have suggested that binge watching is positively associated with negative side effects including depression, loneliness, self-regulations, self-regulation deficiency, anxiety, stress, and health risks (Eastin et al. 2018; Exelmans & Van den Bulck, 2017; Sung et al., 2018; Wheeler, 2015). These research findings correspond with the common perception that binge watching usually involves a weekend-long, pajama-wearing marathon TV viewing (Netflix, 2013). However, binge watchers, themselves, do not see their own behaviors in this way. Netflix (2013) found that 79% of respondents agree that binge watching makes a show more enjoyable,

because watching a show straight through increases the dramatic intensity and makes it easier to spot connections between episodes. In the Harris Interactive survey (2013), nearly 73% of TV streamers reported positive feelings towards binge watching.

In contrast to negative perceptions of binge watching as merely a compulsive act of consumption, a recent study has suggested that binge watching takes viewers into a deeper, quieter, more concentrated, and more contemplative experience (Bercovici, 2013). To trace the binge watching phenomenon, McCracken (2013) worked with Netflix to explore how and why binge watching is resonating with today's viewers. He explained the emergence of a new type of TV audience:

> *"This TV viewer is different, the couch potato has awoken. And now that services like Netflix have given consumers control over their TV viewing, they have declared a new way to watch. Getting immersed in multiple episodes or even multiple seasons of a show over a few weeks is a new escapism that is especially welcomed today"* (Cision, para.4).

Thus, according to this more positive view, binge watching can be considered a restorative experience which is methodically organized, a protest against technology-enabled mindlessness, and a way to reclaim people's time and attention in a rushing, distracting world (Pang, 2014). Because binging is not traditionally considered an admirable behavior, some authors have proposed new terms for this consecutive TV viewing behavior, including immersive viewing (Crouch, 2013), dwelling TV watching (Bercovivi, 2013), or mindful viewing (Pang, 2014).

Based on these studies, it is important to notice that many respondents describe binge watching as an enjoyable and concentrated experience within their own control. These findings take the study of binge watching beyond its previous theoretical frames and the typical negative perspective. Incorporating binge watchers' own experiences and feelings, the present study will focus on the rewarding experiences involved in binge watching. More specially, this study aims to explain: how does the enjoyment of binge watching occur? What factors impact this rewarding watching experience? How does the binge watching schedule work? Finally, why do viewers stop their binge watching plans? Media flow theory, introduced by Sherry (2004), resonates with binge watchers' reports of media enjoyment and fits the binge watching experience well. Therefore, flow theory will be used to explain the new "normal" media consumption behavior in the context of video-on-demand services.

Chapter 2: Literature Review

FLOW CHARACTERISTICS

Flow is the psychological conception constructed by Csikszentmihalyi (1975), and many media users use this concept to describe their holistic sensation while involved in media activities (Csikszentmihalyi & Csikszentmihalyi, 1988; Sherry, 2004). Flow was not originally theorized to explain media consumptions; rather, Csikszentmihalyi developed flow after conducting in-depth interviews with over two hundred people regarding their autotelic or rewarding feelings in the particular activities where they got no payment and little recognition (Csikszentmihalyi, 1975; Csikszentmihalyi & Csikszentmihalyi, 1988). From then on, a more systematic flow model was established and examined in an enormous variety of conditions, such as the relationship between flow and Korean immigrants' life satisfaction (Han, 1988), the impact of flow on writing (Larson, 1988), and discoveries of flow in leisure activities including rock climbing, chess, and dancing (Mannell, Jiri & Reed, 1988), to name a few.

With the emergence of new technologies, flow theory has been applied to broader fields. Trevino and Webster (1992) investigated how the flow state influences employee evolutions and the perceived impacts of email and voice mail systems. Later Webster, Trevino, and Ryan (1993) explored the dimensionality of flow construct in human-computer interactions. Ghani, Supnick, and Rooney (1991) compared the flow state in group work between computer-mediated group and face-to-face groups. After reviewing the conceptional and operational definitions of flow theory in previous research, Novak and Hoffman (1997) measured flow in terms of participants' experience using websites,

focusing on the balance between skills and challenges involved in this activity. In this study, Novak and Hoffman (1997) refined the operational definition of flow state and they suggested that the balance between skills and challenges is in anticipated ways for the occurrence of flow experience. Based on Novak and Hoffman's findings in the context of computer-mediated environments, Smith and Sivakumar (2004) further explored the different dimensions of flow that facilitate Internet shopping behaviors.

Those wide investigations on flow experience indicate that there is no particular behavior or activity that guarantees the occurrence of flow state (Csikszentmihalyi & Csikszentmihalyi, 1988). In fact, even a frustrating activity can induce a state of flow, when the right balance of skill and task is met. When the participant's skill is just right to cope with the demand of a task, the quality of this experience improves noticeably, the state of flow can be achieved, and the participant is likely to describe the activity as enjoyable (Csikszentmihalyi & Csikszentmihalyi, 1988; Sherry, 2004). For example, although work is not typically regarded as relaxing and enjoyable, Allison and Duncan (1988) found that working women felt a strong sense of enjoyment and reward from interacting with their working environment when they could match their skills with working opportunities, decision-making capabilities, and career goals. If tasks are too easy to accomplish, participants feel less immersed in the activities and feel bored. Conversely, when a participant's skill does not match the difficulty of the task at hand, the participant will experience boredom or stress and be prevented from experiencing a state of flow.

Csikszentmihalyi (1993) illustrated the balance of skill and difficulty involved in the flow experience by providing examples of daily activities, such as rock climbing. One can imagine that an experienced rock climber would feel bored while climbing a relatively easy route, whereas the same climbing route is likely to be difficult for beginners, who may consequently feel stressed and frightened. When the rock climbers' skills and the difficulty of climbing route are well-matched, the rock climbers focus their attention on the tasks at hand, and they feel a sense of ecstasy and self-fulfillment while climbing closer to the summit. Therefore, this balance is an important element to induce the flow experience. When challenges and skills are in balance, individuals have a sense of control and become involved in the activities (Csikszentmihalyi, M., 1993). In addition to an equilibrium of challenges and skills, indicators of flow and its intensity are provided by other phenomenological characteristics. These include the merging of action and awareness, centering of attention on a limited stimulus field, loss of self-consciousness, unambiguous goals and immediate feedback, a sense of potential control, an altered sense of time, and the intrinsically rewarding (or autotelic) nature of the activity at hand (Csikszentmihalyi & Csikszentmihalyi, 1988; Csikszentmihalyi, 1993; Nakamura & Csikszentmihalyi, 2002; Sherry, 2004; Smith & Sivakumar, 2004).

MEDIA ENJOYMENT IN FLOW STATE

In the realm of media use, flow theory has rarely been used to analyze media consumption behaviors. The uses and gratifications theory is more often applied to understand media users' motivations for using media. This theory suggests that users' motivations moderate the effects of mass media messages (Nabi & Krcmar, 2004).

Recent studies have also applied the same concept of uses and gratifications to binge watching. Scholars have identified enjoyment or entertainment as the primary motivation for binge watching, but they have not fully explained how the enjoyment occurs and why binge-watching behaviors vary greatly from individual to individual.

The principles of uses and gratifications theory have been applied to various kinds of mediated communication tools (Ko, Cho, & Roberts, 2005) in traditional media, such as radio (Mendelsohn, 1964) and television (Palmgreen & Rayburn, 1979; Rubin, 1981; Bryant & Zillmann, 1984; Lin, 1993), as well as nontraditional media, such as cable modalities (Kang & Atkin, 1999), the World Wide Web (Eighmey & Mccord, 1998; Ferguson & Perse, 2000; Luo & Remus, 2014), YouTube viewing (Haridakis & Hanson, 2009), and movie-related websites (Cho & Ha, 2011; Henkel, James & Croce, 2015). These studies reveal that audiences purposefully select certain media to satisfy their psychological needs, which include surveillance, entertainment, personal identity, escape, and companionship (Bulmer, 1979; Kang & Atkin, 1999; Rubin, 1981). In particular, entertainment has long been identified as one of the main reasons for using media and is viewed as an opportunity to escape from everyday life into a fantasy world (Sherry, 2004). Binge watching involves extreme TV watching (Sung et al., 2018) and is act of excessive media consumption (Eastin et al. 2018). Therefore, as an extreme media usage behavior, binge watching is likely motivated by users' desires to regulate moods, pass time, and escape from negative feelings (Sung et al., 2018; Sussman & Moran, 2013). In addition, motivations for new media use, in general, are helpful for understanding binge-watching behaviors in particular (Sung et al., 2018), and previous studies have indicated

that social interaction and information-seeking are distinct motivations for new media use (Haridakis & Hanson, 2009). Incorporating the motivations for TV watching, media addiction, and new media use, Sung et al. (2018) discovered that entertainment is the only significant predictor of binge watching. This finding explains the difference between traditional TV watching and binge watching, in which the binge viewers' excitement is enhanced by watching multiple episodes in a way that exceeds the excitement associated with traditional TV watching behavior (McCracken, 2013; Sung et al., 2018).

At the core of entertainment experience in binge watching, certain characteristics are linked to feelings of emotional enjoyment, such as pleasure and delight (Nabi & Krcmar, 2004; Vorder, Klimmt, & Ritterfeld, 2004; Zillmann & Bryant, 1994). According to the theory of mood management, media users prefer an intermediate level of pleasant sensation, and they choose media entertainment purposefully to manage their emotional states (Bartsch & Viehoff, 2010; Sherry, 2004; Zillmann & Bryant, 1994). For example, media users bored and under-stimulated enjoy arousing stimuli, whereas over-aroused media users prefer soothing media effects (Bartsch & Viehoff, 2010). The pleasure of media use is achieved by relief from overstimulation through relaxation or from under-stimulation through arousal (Sherry, 2004). Thus, in studies of entertainment gratification, media enjoyment occurs when the media users achieve this inner balance of their emotional valence (Bartsch & Viehoff, 2010; Zillmann, 2000). Enjoyment, as realized in the flow state, is also perceived as both arousing and relaxing, offering an escape from the real world to engage in a fantasy (Csikszentmihalyi, 1993; Sherry, 2004). This intrinsic reward derives from the self-motivating activities where the media users

feel a sensation of being fully involved, comparable to what people feel when performing an activity at the limits of their potential (Csikszentmihalyi, 1993).

For binge watchers and media users more broadly, this sense of inherent satisfaction has been identified as a principle source of media enjoyment (Karimi & Lim, 2010; Ryan & Dei, 2000) that intrinsically motivates binge viewers to act for the fun or challenge entailed (Ryan & Dei, 2000). The media enjoyment derives from a positive state of consciousness in the flow state (Csikszentmihalyi, 1993). When media users experience this positive consciousness, they tend to desire new tasks and develop new skills to remain in the flow state (Csikszentmihalyi, 1993). The connection between flow and media enjoyment initially occurs by chance, but the experience of inner harmony motivates users to seek media enjoyment repeatedly (Csikszentmihalyi, 1993). Here, binge viewers immerse themselves in TV programs by watching a series of episodes in one sitting, and their media enjoyment is enhanced by the long time spent watching (Sung et al., 2018). Therefore, flow theory resonates with reports of media enjoyment and fits well with the optimal experience of binge watching (Sherry, 2004). In order to understand flow state in binge watching, it is also important to consider the closely related literature on narrative transportation that has been studied in narrative.

NARRATIVE TRANSPORTATION RESEMBLES FLOW STATE

As described above, media enjoyment brings about desirable outcomes, and binge viewers forget themselves in process of prolonged media consumption (Csikszentmihalyi & Csikszentmihalyi, 1988). The more an individual engages in binge watching, the more deeply he or she engages with the narrative content in the television programs (Sung et

al., 2018). Sung et al. (2018) also found that binge watching is an immersive experience that presents a high level of media transportation. Drawing from the transportation theory, Green and Brock argued that transportation into a narrative feels like media flow (Busselle & Bilandzic, 2009; Green, 2004; Green & Brock, 2000). Following Gerrig's (1993) argument about readers' experiences, Green and Brock (2000) suggested that when audiences focus on the narrative content, they may lose awareness of real-world facts as they become immersed in the narrative. Previous studies indicate that both transportation and media flow involve full attention to an activity, turning out the actual world, and losing time track (Bilandzic & Busselle, 2011).

Green and Brock (2000) conceptualized transportation as a convergent process, where mental capacities become focused on what occurs in the narrative. Transportation is typically characterized as a desirable state, and occurs solely in response to narrative communications (Green, 2004). That is, when the readers or viewers are completely immersed in the narrative, they may lose track of time, become less aware of real-world facts, or not notice what is happening around them (Busselle & Bilandzic, 2009; Busselle & Bilandzic, 2008; Green & Brock, 2000). In this example, the term "reader" or "viewer" is broadly defined as any recipient of narrative information (Green & Brock, 2000). The transportation experience is similar to the media flow state, during which media users lose access to some real-world facts and completely focus on the actions they are performing (Busselle & Bilandzic, 2008; Green & Brock, 2002; Green & Brock, 2000). In this state, media users process the narrative sense of "being there" by assuming the

perspective of a character, understanding the narrative content and emotional structure through the mediated communication technology (Bilandzic & Busselle, 2011).

Busselle and Bilandzic (2008) suggest that "high levels of experiential engagement with a narrative is regarded as a flow-like state that centered on the construction or realization of the narrative". In the transportation experience, the readers' comprehension capacities or skills to interpret content should match the levels of media difficulty (Sherry, 2004). Feeling lost (Busselle & Bilandzic, 2008; Nell, 1988) in the narrative results from the sense of loss of self-awareness combined with the construction of meaning from an alternative world (Busselle & Bilandzic, 2009). The viewers' cognition is focused on analyzing narrative settings, events, characters, and their relationships, as well as predicting approaching information and hypothesizing explanations (Busselle & Bilandzic, 2008). These engaged viewers feel an intense feeling of focus at a holistic level (Busselle & Bilandzic, 2009). Therefore, absorption in an activity and a deep sense of enjoyment suggest that transportation resembles the media flow experience (Green, Brock, & Kaufman, 2004; Csikszentmihalyi, 1990).

Although transportation and flow experience share similar dimensions, there are distinctions between these two concepts. Hoffman and Novak (1996) studied flow experience among web users. In their content analysis, flow is defined in terms of the experience of flow (intrinsic enjoyment, loss of self-consciousness), structural properties of the flow activity, and antecedents of flow experiences (skills/challenge balance, focused attention, and telepresence). In addition, Csikszentmihalyi, M. and Csikszentmihalyi, I. S. (1998) focused on the congruence of a person's skills in an

activity and their perceptions of the activity. An equilibrium of challenges and skills is an important antecedent factor for the occurrence of flow state. Sherry (2004) studied the flow state in media use, and she has also stressed that message difficulty and usage skills are two factors that determine whether flow is achieved or not in media use. Thus, the antecedent factor for flow theory is the balance between skills and challenges. In contrast, the antecedent factors for the occurrence of transportation experience in reading include reading goals, prior relevant knowledge, individual differences, text quality, and situational factors (Green, 2004). These antecedent factors stress the quality of the text and audience's cognitive ability to create the imagery world.

The consequence of flow state is enjoyment or a feeling of intrinsic reward. This enjoyment motivates people to repeat the activity, pursue new challenges, and develop skills (Csikszentmihalyi, 1993). In narrative transportation, key consequences include changing real-world beliefs and attitudes in response to information, claims, or events in a story (Green, 2004). Transportation also tends to increase readers' positivity toward characters and reduces their negative thoughts about narrative stories (Green & Brock, 2000). As a result, transportation theory investigates how transportation as a mental process changes viewers' real-world beliefs. When compared with flow theory, transportation specifically focuses on emotional response and mental imagery (Green et al., 2008). Individuals can experience flow in a variety of activities, whereas they can only experience transportation in the narrative (Green et al., 2008). Therefore, transportation describes audiences' emotional experience and mental imagery when they are experiencing flow with narrative.

Binge watchers are in control of choosing the TV programs they would like to binge watch, and they feel they cannot stop watching their favorite TV programs, but continue engagement by hitting the "next" or "play" button (Dvorak, 2013; Sung et al., 2018; The New Yorker, 2013). When binge watchers enter a state of high transportation and become fully immersed in TV programs, they experience a physical sense of losing access to the real word, such as not noticing others entering the room, or psychological loss, such as distancing themselves from reality (Sung et al., 2018). Thus, when binge watchers experience flow with a televised narrative world, the high state of transportation motivates the viewers to watch multiple episodes in one sitting (Busselle & Bilandzic, 2009; Sung et al., 2018).

FLOW IN BINGE WATCHING

Based on previous research, it is clear that binge watching results in a flow state. The present study uses the characteristic dimensions of the flow experience to examine the possibilities of flow in binge-watching. Csikszentmihalyi (1993) discovered the characteristic dimensions that people mentioned in their flow-like experience include clear goals, focused concentration, merging of action and awareness, loss of self-consciousness, distortion of temporal experience, an equilibrium of challenges and skills, and enjoyment. If binge viewers also experience these dimensions, then binge watching can lead to a flow state.

First, binge watchers have clear goals to arrange their binge-watching activity, such as subscribing to the specific video-on-demand websites, selecting favorite TV programs, schedule viewing time, finding a place for extended viewing, etc. Binge

watchers are actively involved in the watching experience. According to the Harris Poll research, American audiences took advantage of watching enjoyable shows on their own schedule and they were motivated to find out what happens next (Harris Interactive, 2013). Secondly, Horvath's (2004) research on television addiction indicated that binge viewers experience relaxation and a feeling of escape while watching programs. Whenever an activity produces flow, a strong attraction to repeat that activity begins to operate (Csikszentmihalyi, 1993). The binge-viewers enjoy watching TV programs, and they would not easily be distracted by other activities. These gratifications indicate the intense focus and loss of self-consciousness involved in binge-watching (Horvath, 2004; Sherry, 2004). Thirdly, binge-viewers experience temporal distortion and lose track of time (Sherry, 2004). Binge-viewers reported intense feelings of being lost in consecutive episodes (Dvorak, 2013; Riddle et al., 2017). Finally, binge-watching provides an intrinsically motivating experience (Dvorak, 2013), and enjoyment has been identified as the primary reason for binge watching (Sung et al., 2018). Additionally, previous uses and gratifications studies indicate that watching TV programs provides an enjoyable experience (Sherry, 2004). Based on the analyses mentioned, binge-watching allows media flow to happen when there is balance between media message difficulty and usage skills (Csikszentmihalyi, 1993). These two factors determine the occurrence of media flow (Sherry, 2004). In the case of binge-watching, if the binge-viewers lack the skills to interpret the message delivered by a program, they are less likely to experience the flow state.

THE ROLE OF GENRE SCHEMA IN MEDIA FLOW

Sherry (2004) found that film and television have highly evolved formal structures that enable audiences to understand storylines easily. For example, Field (1976) argued that most Hollywood film fits into one typical narrative form, and most up-and-coming screenwriters are taught to follow the same form (Sherry, 2004). These conventional stories are easily accessible for most consumers.

Sherry (2004) suggested that television programs that depart from conventional formal characteristics are more difficult to follow than more conventional programs. For example, *Black Mirror* departs from familiar formal characteristics and uses metaphors to deliver story content. The show's violation of conventions makes it difficult to understand for some viewers. However, not all binge watchers will find it hard to understand or inaccessible. A great many audiences enjoy this type of TV program and would like to be fully involved. They may read reviews of the show, discuss it with other audience members, and search for relevant information in order to understand complex plots. During this process, they develop their own specialized knowledge about the show. These media use skills can be learned through practice or may be formally studied (Sherry, 2004). Based on these studies, it is clear that narrative genre is important for viewers' information processing. Green's (2004) study indicated that individuals who have prior knowledge, such as knowing about character's situation, are more likely to be transported into the narrative and feel more enjoyment.

In binge watching, viewers' prior knowledge about one of the main topics of the story increases their sense of transportation (Green, 2004) and provides more positive

evaluations (Larsen & Laszlo, 1990; Green, 2004). Because a story cannot make explicit all the details for a comprehensible story, the viewers rely on their preexisting knowledge from both fictional and nonfictional sources in order to process narratives (Rapaport & Shapiro, 1995; Busselle & Bilandzic, 2008).

Genre schema is defined as the prior knowledge of the fictional world, and it separates narrative experience from real life by imposing a narrative form (Busselle & Bilandzic, 2008). In the current study, the term *genre* refers to different types of popular narratives, such as science fiction, fantasy, romance novels, horror, and so on (Dixon & Bortolussi, 2009). Different genres have conventional or typical patterns of story, setting, and characters, and viewers use their understanding of these patterns to construct stories and process narrative comprehension (Busselle & Bilandzic, 2008; Segal, 1995a). Audiences use genre conventions to decode and interpret specific television messages (Morley, 1980), and TV viewers' genre preferences remain relatively stable when compared to their preferences for specific shows and episodes. It is possible that certain types of narrative programs are less accessible than others for certain viewers. For example, if a binge viewer always watches science fiction programs, these types of shows will be more accessible for them to understand.

During the viewing process, audiences construct mental models related to issues, conflicts, and story progressions (Busselle & Bilandzic, 2009; Graesser, Olde & Klette, 2002). Binge viewers may use certain features, such as costumes, music, dialogue cues, etc. to make predictions about future events or to make interferences about previous events (Roskos-Ewoldsen, Davies, & Roskos-Ewoldsen, 2004). The activation of a genre

schema and retrieval of prior knowledge about genre allows the binge viewers to anticipate the nature of the upcoming story (Busselle & Bilandzic, 2008). Cantor and Pingree (1983) also found that TV program watchers report their cognition-based enjoyment deriving from applying genre schemas to make predictions about plot outcomes.

During the repetitive viewing process, binge viewers will develop genre knowledge, master skills of media use, and enjoy facing the challenges brought by new programs. The occurrence of the flow state is realized by the balance between their prior knowledge of program genres and the difficulty of processing the narrative content message. Then, when the binge watchers are in the flow state, they will experience the media enjoyment in this desirable state. The two hypotheses are therefore proposed:

H1: When binge viewers prior experience preexisting genre schemas to process the narrative content, they are more likely to experience enjoyment from the narratives.

H2: When binge viewers prior experience preexisting genre schemas to process the narrative content, they are more likely to be transported into the narratives.

PERCEIVED REALISM IMPACTS THE FLOW STATE

Green (2004) suggested that transportation and perceived realism are positively related. If TV viewers feel they have experienced similar events in real life, the lessons implied by those events may be more powerful (Green, 2004). Therefore, this study

speculates that perceived realism has the potential to influence media transportation in binge watching.

Audience perceptions of the realism of narrative content have been regarded as an important research topic for several decades (Potter, 1986). Researchers have devoted significant attention to the way audiences make perceived reality judgements to process the media stories (Shapiro & Chock, 2003). Research on situational models has also indicated that people construct their narrative experience through encoding the normal passage of time, the normal organizations of space, and normal expectations for how characters and objects interact (Rapp & Gerrig, 2002).

Previous research on perceived realism focuses on different aspects, and its definition varies with different perspectives. Perceived realism is defined as the extent to which audiences perceive televised content as a realistic portrayal of life (Hawkins, 1977; Coleman, Reynolds, & Torbati, 2019). But the definition of "real" varies across different individuals and may even vary within the same individual over time. For example, children's ability to distinguish between real and unreal varies based on their past experiences, and their judgments about reality are based on their mixed experiences from both the real world and television (Austin et al., 1990; Davies, 1997; Shapiro & Chock, 2003). Moreover, during the passage from middle to late childhood, children define "real" as probable or plausible rather than possible (Shapiro & Chock, 2003). Instead of investigating the status of the story or event (fictional or nonfiction), Green (2004) conceptualized perceived realism as how audiences evaluate the plausibility and realism of story events, settings and characters. By adulthood, people tend to reach a more

complex understanding of reality; as a result, adults tend to perceive events in TV programs as less complex, more intense, and more solvable than people know them to be in real life (Cohen, Adoni, & Drori, 1983; Adoni, Cohen, & Mane, 1984; Shapiro & Chock, 2003). Even when people watch the news, they do not consider it to be entirely real (Shapiro & Chock, 2003). In this situation, there is no obvious difference between fictional and nonfictional programs, because these two types of programs are both perceived as not plausible enough to reflect the real lives. Adults understand that fictional programs make more real connections with our lives, particularly emotional lives, than presentations that are arguably more realistic (Shapiro & Chock, 2003). Therefore, in this study, fictional and nonfictional programs will not be differentiated, particularly in terms of measurement of flow state.

In television programs, the boundary between real and unreal has become vague. Shapiro and colleagues conceptualized perceived realism on a broad level, defining it as the extent to which a portrayed event or situation is similar to a viewer's prototype of that event or situation (Busselle, Ryabovolova, & Wilson, 2004; Shapiro & Chock, 2003; Shapiro & Fox, 2002). In other words, audiences make appropriate judgements based on the simple feature of the stimulus – the number of typical and atypical elements of the story (Shapiro & Chock, 2003). Atypical elements are defined as items that are plausible but are not a necessary or usual part of the story (Shapiro & Chock, 2003; Graesser, 1981). The audiences make sense of the stories by seeing beyond the atypical items.

Busselle and Bilandzic (2008) divide perceived realism into two distinct categories: external realism judgments and narrative realism. External realism judgments

refers to the extent to which fictional content is consistent with viewers' actual lives, and narrative realism refers to the consistency of the program's narrative logic, motivations, and events (Busselle & Bilandzic, 2008). In the current study, both external realism and narrative realism will be measured. In terms of narrative realism, when audiences process the media content, they may find it difficult to understand and interpret film and television programs that depart from typical or conventional characteristics (Sherry, 2004). During the watching experience, the viewers' emotions are evoked by the fictional accounts and are similar to stimulated emotions related to nonexistent situations (Bechara, Damasio, Damasio, & Anderson, 1994; Busselle & Bilandzic, 2008; Harris, 2000). The audiences' beliefs and attitudes are influenced by accumulating the typical television events over time (Gerbner, Gross, Morgan, & Signorielli, 1986; Shapiro & Chock, 2003). Greenberg and Busselle (1992) indicate perceived realism is positively related to the audiences' judgments of the program quality. Then, audiences may consciously or unconsciously engage in the narrative world and keep away from their real lives (Green, 2004).

Green (2004) found that transportation and perceived realism are positively related. More specially, individuals who are more transported into narrative content have higher perceptions of the reality of the narrative content, and they are likely to change their real-world beliefs and attitudes in response to information, claims, or events presented in a story (Green, 2004). In the case of processing the narrative content for the viewers, there are two interrelated activities are central to processing: coherence and explanation (Graesser et al., 2002; Russelle & Bilandzic, 2008). Television viewers take a

longer time to make realism judgments about stories which contain incongruent emotional reactions (Russelle & Bilandzic, 2008; Shapiro, Barriga, & Beren, 2004). Violations of narrative realism occur when the information from the narrative is inconsistent with the typical elements which are already represented in the situation model or in the specific story world logic (Russelle & Bilandzic, 2008). Violations of realism cause disruptions of the audience's narrative experience, further disrupt the flow of constructing a mental model from a narrative, and reduce the experience of transportation (Russelle & Bilandzic, 2008). Transportation is highly correlated with enjoyment (Bilandzic & Busselle, 2006; Green et al., 2004). The state of flow is also associated with enjoyment (Csikszentmihalyi, 1991; Sherry, 2004).

The previous research reviewed above has investigated the impact of perceived realism on television programs. In the case of binge watching, the question of how perceived realism influences the flow state has rarely been studied. Therefore, two hypotheses are proposed for further investigation.

H3: When binge viewers have higher perceptions of the reality of the narrative content, they are more likely to be transported into the narratives.

H4: When binge viewers have higher perceptions of reality of narrative content, they are more likely to experience enjoyment from the narratives.

When audiences assess the external or narrative realism of a film or television program, this assessment tends to interfere with their ability to processing other incoming information related to the narrative (Bradley & Shapiro, 2005; Busselle & Bilandzic, 2008; Busselle, Ryabovolova, &Wilson, 2004). Preexisting genre schemas should prompt realism judgements because when the audiences process the prior knowledge to analyze the narrative content, an evaluation of realism would be activated to construct the story (Busselle & Bilandzic, 2008). Genre schemas support the assessment of perceived realism because knowledge about genres helps the viewers find the appropriate story world logic (Busselle & Bilandzic, 2008). Genre knowledge makes the comprehension of stories easier (Busselle & Bilandzic, 2008; Segal, 1995), and genre patterns become benchmarks for judging the verisimilitude of the narrative content (Busselle & Bilandzic, 2008; Todorov, 1997). Based on the interaction between genre schemas and perceived realism, audiences who have more prior knowledge of a narrative genre and higher perceptions of narrative content are likely to experience higher levels of transportation and enjoyment. Thus, the following research questions are put forward based on this premise:

RQ1a: Does the interaction of preexisting genre schemas and perceived realism of narratives predict binge viewers' transportation?

RQ1b: Does the interaction of preexisting genre schemas and perceived realism of narratives predict binge viewers' enjoyment?

PLANNED AND UNPLANNED TV BINGE WATCHING

Video-on-demand services such as Netflix, Amazon, and Hulu have given their consumers control over their TV viewing, and these viewers are not like the traditional image of a passive couch potato (McCracken, 2013). Binge viewers are not watching "whatever's on"; instead, they organize their time and immerse themselves in a deeper, quieter, more concentrated and more contemplative TV viewing experience (Bercovici, 2013).

Recently, Riddle et al. (2017) proposed two types of binge-watching behaviors: intentional and unintentional. Unintentional binge-watching is defined as when viewers watch multiple episodes of the same program without setting the goal of doing so initially (Riddle et al., 2017; Van den Bulck, 2006). Intentional binge-watching occurs when the viewers clear their schedule and watch multiple episodes as a planned event (Dvorak, 2013; Harris Interactive, 2013; Riddle et al., 2017; Van den Bulck, 2006). When binge watchers are highly immersed in the TV programs, they feel greater desire to continue watching the programs than to stop their viewing experience. The transportation or flow state into TV programs motivates the binge watchers' desire to experience this inner harmony again (Csikszentmihalyi, 1993). As a result, they cannot help but continue watching the episodes by hitting the "next" or "play" button (Sung et al., 2018). Therefore, binge watching provides a "diving" experience for the viewers. (Matrix, 2014).

Flow has been identified as a continuous variable, ranging from none to intense (Csikszentmihalyi & Csikszentmihalyi, 1988; Smith & Sivakumar, 2004; Trevino &

Webster, 1992). As a continuous variable, its duration varies across different individuals (Smith & Sivakumar, 2004). For example, some individuals may be able to remain in the flow state longer than others because of inherent characteristics, such as their openness to flow experiences, well-being, personality, etc. (Csikszentmihalyi & Csikszentmihalyi, 1988). In the case of binge watching, this means that some binge watchers will remain in the intense flow state for a longer time. Viewers' involvement in this playful and exploratory binge-watching experience is self-motivating because it produces pleasurable feelings that they want to recreate through repetitive behavior (Smith & Sivakumar, 2004). The flow experience is expected to motivate binge watchers to keep watching the episodes and facilitate excessive binge-watching behaviors. However, if binge watchers face physical limitations, such as distractions from tiredness, they will not easily change their viewing plan. The following research question is proposed to investigate whether the desirable state (or flow experience) motivate binge watchers to change their viewing plan beyond their advanced planning:

Research Question 2: Does planned or unplanned binge watching influence the flow experience?

Chapter 3: Methods

PARTICIPANTS

Consistent with Pittman & Sheehan (2015), binge watching was defined as watching at least two or more episodes at a single viewing event. Therefore, in the online questionnaire, participants who indicated watching more than two episodes in their last TV viewing experience were included in this study. From this group, a total of 146 U.S. adults participated in this study. Forty-nine percent of participants were female and fifty-one percent were male. The average age within the sample was 38 years old (*SD* = 11.71). With regard to ethnicity, 77% were Caucasian, 6% Asian, 6% African American, 10% Hispanic and 3% indicated other. Ten percent participants earned a high school degree or equivalent, 16% finished some college, 14% earned associate degree, 53% had a bachelor degree, and 8% completed a graduate degree. In terms of the employment status, 74% participants were full-time employees, 11% were employed as part time, 6% were self-employed, 3% were retired, 1% were currently looking for work, 3% were homemakers, 1% were students and 1% were unable to work or not currently looking for work. In terms of personal income of 2018, 17% participants earned personal income was less than $20,000, 35% participants' personal income was between $20,000 and $49,999, and 45% personal income was between $50,000 and $149,999. 2% participants earned more than $150,000. With regard to the number of episodes they consecutively watch in one sitting, 14% participants watched only one episode of the same program, 22% watched two episodes, 25% watched three episodes consecutively, 10% watched five episodes, and 30% indicated watching six or more episodes consecutively in a typical

viewing experience. Among binge watchers, 20% participants were found to binge watch every day, 21% binge watched a couple times a week, 12% binge watched several times a week, and 14% indicated that they binge watched weekly. In terms of their last binge watching experience, 30% participants indicated that they binge watched yesterday, 31% binge watched a couple or several days ago, and 14% participants binge watched last week. Finally, the average number of shows in their last viewing experience was four (*SD*=2.8). With regard to the platform they used for watching TV programs in their last viewing experience, 36% binge watched the shows from Netflix, 23% through cable, fiber-optic, or satellite service, 16% watched through Hulu, and 14% binge watched through Amazon Prime. The most popular device they used to watch TV programs is television (56%), following by laptop (21%).

PROCEDURE

An online Qualtircs questionnaire was posted on the "Human Intelligence Task (HIT)" website on Amazon's Mechanical Turk (AMT) platform. The respondents were able to know the general description of the study, the criterial for participation, the compensation structure and the estimated time necessary to complete the survey prior to participation. For high-quality of the participation, the compensation rate was established at 50 cents per survey and the survey would remain for seven days.

This study defined binge watching as watching two or more episodes of the same TV programs in one sitting (Pittman & Sheehan, 2015). Participants were asked to indicate the number of episodes they watched during their last TV viewing experience. This filter question was used to identify binge watchers from non-binge watchers.

Therefore, only participants who indicated watching two or more episodes consecutively of the same program in their last TV viewing experience were included in study analyses. And, all participants who indicated watching less than two episodes in their last viewing experience were discarded from all analyses.

PROGRAM CODING

As the coding was confined to the program genres (Action and Adventure, Anime, Comedy, Crime, Documentary, Drama, Horror, Kids and Family, Reality, Romance, and Science Fiction), the coder was able to code the program genres that the participants indicated they were watching in their last binge viewing experience. With regard to the coding rubric, the coder first confirmed the TV program genres based on the information provided by the main subscription-based video-on-demand services' websites, such as Netflix, Amazon Prime and Hulu to confirm the relevant program genres. However, when these websites did not provide information of the TV program genres, program genres information was located from the Internet Movie Database (IMDb), an originally fan-operated database website. After all the television programs were coded by program genres, the coder assigned the values to each genre based on the participants' responses to how often they watched the eleven genres. To this end, the variable, preexisting genre schema, anchored the show binged to assessment of how often they binged that genre.

In order to demonstrate the coding procedure, the following example explains the coding procedure. When a participant indicated that he/she was watching *Dr. Pimple Popper* during the last binge watching experience, the coder first went to Amazon Prime

to confirm the program genre of *Dr. Pimple Popper*. It indicated that its genre was reality. Then the coder checked this participant's response toward how often he/she watched the television programs of reality genre. This participant indicated that he/she rarely watched the reality shows. Since these TV program genres using a seven-point scale with 1 = Never and 7 = Always, this participant was assigned 2 for this program.

VARIABLES

Viewing Schedule: In terms of viewing schedule, planned and unplanned behavior was assessed with a single item asking participants if their last binge experience was planned (N = 100) or unplanned (N = 46). The behavior of changing viewing schedule was assessed by the question about how often the participants watched more than planned when they watched their most familiar genre. Participants responded on a seven-point scale, with 1 = Never, 4 = Sometimes, and 7 = Always (M = 3.66, *SD* = 1.46).

Preexisting Genre Schema: Participants were asked to indicate how often they watched each of eleven TV program genres. Participants responded on a seven-point scale, with 1 = Never, 4 = Sometimes, and 7 = Always. The eleven TV program genres were selected by incorporating with the ten classic program genres (Hawkins et. al., 2001) and popular program genres on main subscription-based video on demand service (Netflix, Hulu, and Amazon Prime). The eleven program genres are Action and Adventure (*M* = 4.40, *SD* = 1.45), Anime (*M* = 2.96, *SD* = 1.91), Comedy (*M* = 4.63, *SD* = 1.41), Crime (*M* = 4.13, *SD* = 1.61), Documentary (*M* = 4.46, *SD* = 1.43), Drama (*M* = 4.31, *SD* = 1.56), Horror

(*M* = 3.71, *SD* = 1.87), Kids and Family (*M* = 3.53, *SD* = 1.95), Reality (*M* = 3.54, *SD* = 1.76), Romance (*M* = 3.46, *SD* = 1.82) and Science Fiction (*M* = 4.29, SD = 1.84).

Perceived Realism: The perceived realism scale is adapted from the modified version of the Perceived Plausibility Subscale of the Perceived Reality Scale (Elliott, Rudd & Good, 1983). Eight items which were relevant to the narrative content were used in current study to assess perceived realism and believability of characters, setting, dialogue, and other aspects of the communication (Green, 2004). Sample questions include *"The dialogue in the narrative is realistic and believable"* and *"The way people really live their everyday lives is not portrayed very accurately in this narrative".* Participants responded on a seven-point scale, with 1 = Strongly Disagree, 4 = Neither Agree or Disagree, and 7 = Strongly Agree (*M* = 4.35, *SD* = 1.13, α = 0.80).

Media Enjoyment: Media enjoyment items were adapted from Game Enjoyment Scale (Su-Lin, Tuggle, Mitrook, Coussement, & Zillmann, 1997). Sample questions include *"The last time viewing experience made me feel good"* and *"I enjoyed it"*. Participants rated their last time viewing experience by using ten items where they could give up to ten "stars" for each item. Star rating was frequently used for audience rating on movie or program websites. (*M* = 5.70, *SD* = 1.39, α = 0.81).

Transportation scale: Transportation scale was adapted from the Developing Narrative Engagement Scale (Busselle & Bilandzic, 2009) and Transportation Scale (Green and

Brock, 2000). The transportation scale was used to assess individuals' immersion level into the narrative programs and provided a more comprehensive understanding of participants' narrative transportation. Sample questions include "While I was watching the TV programs, I could easily picture the events in it taking place", "While viewing I was completely immersed in the story", and "While the program was on I found myself thinking about other things". Participants responded each item on a seven-point scale, with 1 = Strongly Disagree, 4 = Neither Agree or Disagree, and 7 = Strongly Agree. (M = 4.47, SD = 0.77, α = 0.91).

Chapter 4: Results

Data Analysis

Hypotheses 1 – 4 were examined with correlation. Research Question 1a and Research Question 1b were examined with liner regression, and Research Question 2 was examined with T-test.

The effect of preexisting genre schema (H1 and H2)

Supporting Hypothesis 1, data indicate that preexisting genre schema was significantly and positively related to the binge watchers' media enjoyment ($r = .38$, $p < 0.01$). With regard to the relationship between preexisting genre schema and narrative transportation (Hypothesis 2), data indicate that preexisting genre schema was significantly and positively related to the narrative transportation ($r = .36$, $p < 0.01$). Thus, Hypothesis 2 was supported by the data.

The effect of perceived realism (H3 and H4)

Turning to Hypothesis 3, the result indicates that perceived realism was significantly and positively related to the narrative transportation in binge watching ($r= .42$, $p < 0.01$). However, when looking at the relationship between perceived realism and enjoyment (hypothesis 4), the data do not support the hypothesized relationship ($r = .07$, $p = 0.41$). Thus, H3 was supported, but H4 was not supported.

The interaction influence between two variables (RQ1 and RQ2)

A linear regression was conducted to examine whether there is a significant interaction between perceived realism and preexisting genre schema that affects the flow experience in binge watching. The result indicated a significant interaction influence on

transportation (F (1, 131) = 52.30, $p < 0.01$, $R^2 = .285$). Then a linear regression was conducted to examine the interaction influence on media enjoyment and the results indicated a significant interaction influence (F (1, 131) =12.05, $p < 0.01$, $R^2 = .084$). When plotting the interaction between perceived realism and preexisting genre schema, the result indicated that when the binge watchers have higher perceptions of the reality of narrative content, transportation (Figure 1) and media enjoyment (Figure 2) increase. However, when the binge watchers have low or medium perceptions of the reality of narrative content, transportation (Figure 1) and media enjoyment (Figure 2) do not vary.

Figure 1

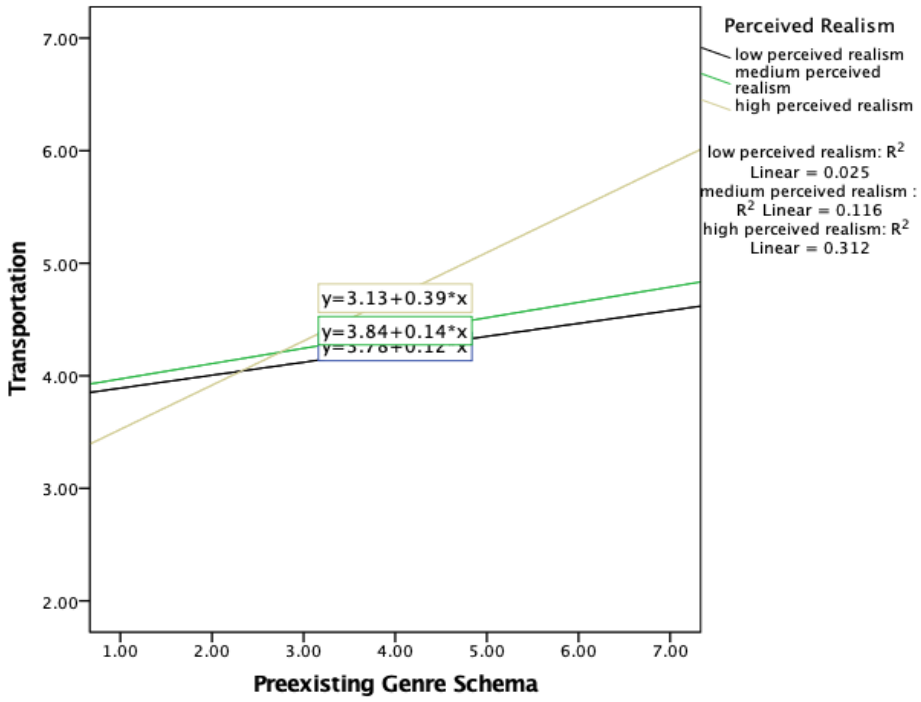
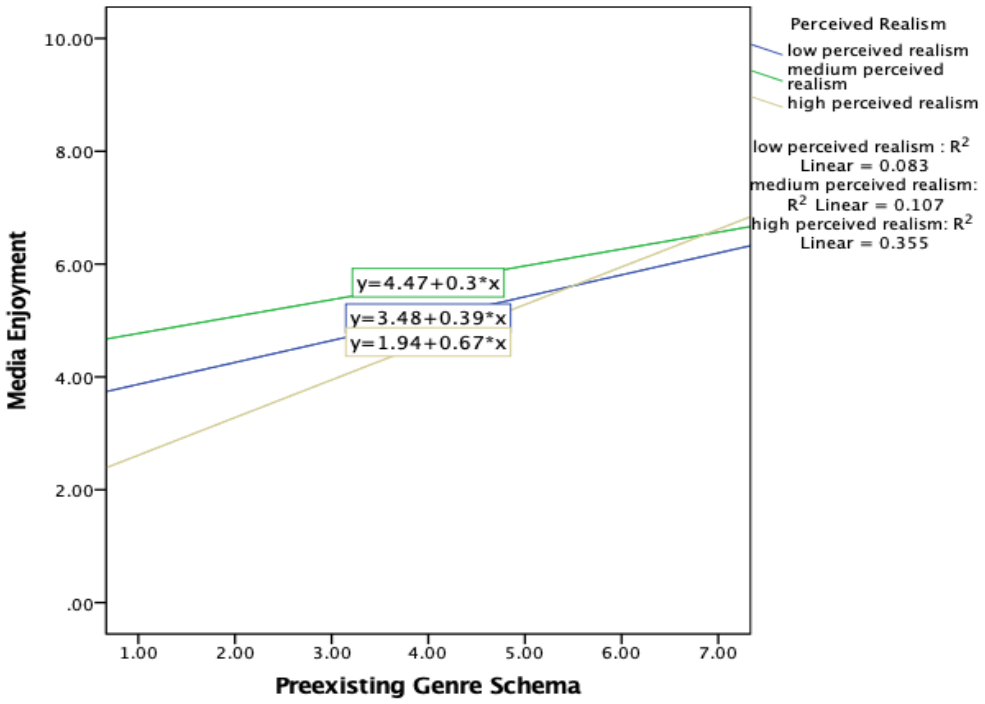


Figure 2



THE INFLUENCE OF PLANNED AND UNPLANNED VIEWING EXPERIENCE (RQ2)

Finally, when looking at flow (i.e., transportation and enjoyment) differences between planned and unplanned, data indicated a significant difference between planned (M = 4.69 , SD = .70) and unplanned (M = 4.32, SD = .81) viewing for transportation (t = 2.64, $p < 0.01$). However, when looking at enjoyment (t = 1.08, $p > 0.05$), planned (M = 5.59, SD = 1.27) and unplanned (M = 5.31, SD = 1.60) did not differ.

Chapter 5: Discussion

The current study investigated the impact of preexisting genre schema and binge viewers' perceived realism on positive viewing outcomes such as media enjoyment and narrative transportation. Further, this study examined the different impact of planned and unplanned viewing behavior on binge watchers' flow experience. The data supported the hypotheses that preexisting genre schema is significantly and positively related to media enjoyment and narrative transportation (Hypothesis 1 and Hypothesis 2), and that perceived realism significantly and positively related to narrative transportation (Hypothesis 3). However, perceived realism did not relate to media enjoyment (Hypothesis 4). The results also indicated that there is significant interaction between preexisting genre schema and perceived realism to predict binge watchers' transportation (Research Question 1) and binge watchers' enjoyment (Research Question 2). That is, results indicated that when the binge watchers have higher perceptions of reality of narrative content, the flow experience (i.e. media enjoyment and narrative transportation) varies, whereas when the binge watchers have low or medium perceived realism, the flow experience (i.e. media enjoyment and narrative transportation) does not vary. Additionally, results indicated that media enjoyment and transportation do not vary to the same extent when preexisting genre schemas and perceived realism are examined in binge watching. Finally, planned and unplanned viewing schedule have no different influence on flow experience in binge watching (Research Question 2).

THEORETICAL IMPLICATIONS

To begin, the present study advances the current understanding of binge watching by explicating the role of preexisting genre schema. Binge watching, as a new media consumption behavior, takes audiences beyond the traditional model of TV viewing into a deeper, quitter, more concentrated, and more contemplative watching experience (Bercovici, 2013). As explicated, it is noticeable that binge watching and flow experience share the similar characteristic dimensions. Recent research indicates that binge watching may present a high level of media transportation (Sung et al., 2018). From this research, binge watching behavior is highly related to flow experience but rarely studied. In an attempt to fill this literature gap, the current study positioned enjoyment and transportation as two mechanisms representing flow state. Here, results indicate that flow (i.e., media enjoyment and transportation) in binge watching is influenced by preexisting genre schema, which is defined as the skill used to understand the narrative content. However, further studies need to explore how media enjoyment and transportation are influenced by preexisting genre schemas, as the current results were not conclusive. In addition, scholars indicate that planned and unplanned binge watching behavior result in different media effects (Eastin et al. 2018; Riddle et al., 2017; Sung et al., 2018). Based on these studies, the present study suggests d that while planned and unplanned viewing behavior have a different influence on narrative transportation, they do not change levels of media enjoyment. Indeed, the results indicated that planned and unplanned viewing behavior differ. Incorporating results in the present study, the flow construct in binge watching is defined in terms of the experience (i.e., media enjoyment and high narrative

transportation), structural properties of the flow activity (viewing plan, the interactivity with the video streaming services), and antecedents of flow such as preexisting genre schema.

The media enjoyment and transportation variables examined in this study provides some explanation regarding why binge watching resonates with today's viewers. When they have preexisting genre schema to process the TV program's content, they would feel enjoyable and highly transported. Simply, these positive outcomes motivate consumers to keep watching the programs.

In addition, this study provides a new perspective to redefine binge watching behaviors. The present study examined the binge watchers' mood at the beginning and the end of their viewing experience perceptively. The mood scale was adapted from Experience Sampling Method or ESM (Csikszentmihalyi & Csikszentmihalyi, 1988). Thirteen items were used to measure binge watchers' mood change during their viewing experience in one sitting. A paired T-test was conducted to analyze the data, and the results indicated that there is significant difference of mood between the beginning and the end during binge watchers' viewing experience. Therefore, the results seemingly indicate that binge watching is a continued behavior, and its intensity changes during the viewing experience. Binge watchers were not always in a highly intense viewing state and they might be distracted by the external factors, such as their physical environment, and internal factors, such as mood and cognitive capacity. The previous study defined binge watching by the number of episodes, the viewing time in one sitting, viewing frequency, and deviation from normal watching behavior (Eastin et al. 2018; Harris

Interactive, 2013; Jenner, 2015; Nielsen, 2013; Sung et al., 2018). However, when the viewers simply play the TV programs and are not engaged or immersed in the content, this viewing behavior is not the same as common perceptions of binge watching. Here, rather than focusing on the four behavioral dimensions, the present study suggests that the engagement, defined with the construct of flow state, is considered into the definition of binge watching. Incorporating the review of previous studies, the present study suggests that binge watching occurs when binge watchers are affectively and cognitively engaged (i.e, flow state) while watching more than two episodes of the same TV programs in one sitting event.

PRACTICAL IMPLICATIONS

With regard to the practical implications, the results indicated genre schema is significantly related to media enjoyment and narrative transportation is useful for promoting TV program recommendation systems. The main subscription-based video on demand websites such as Netflix, Amazon Prime and Hulu can provide program recommendations based on the program genres which their subscribers are frequently binge watching. This strategy promotes the services of subscription-based video-on-demand websites, and binge watchers would have a higher chance to experience the enjoyment and being highly transported into the TV programs. The present study provides a theoretical support for the TV program recommendation systems.

Further, the present study has suggested that the intensity of binge watching has changed during the viewing process. This finding suggests that television production companies should consider audiences' capacity for understanding the narrative content in

order to arrange the number of episodes of TV programs. The review of previous research has indicated that when binge watchers deviate from their normal watching behavior, unplanned viewing behavior led to significantly higher levels of anxiety and stress than planned viewing (Eastin et al. 2018). So planning viewing in advance leads to a higher chance of an enjoyable binge watching experience. When the long-time TV programs are divided into appropriate time of each episode, TV viewers would have a higher chance to be transported into the narrative programs. For the movies and television production companies, the present study provides a theoretical foundation to support adapting long-time or complicated movies for a series of TV programs.

LIMITATION

The present study has not indicated that the perceived realism is significantly positively related to the flow experience in binge watching. Audiences have different perceptions of the perceived realism in different program genres. For example, when they binge watch science-fiction movies, their perceptions of reality would be more on the emotional dimensions than realistic information. The current study did not distinguish program genres while examining the perceived realism variable, so there is not a significant relationship between perceived realism and flow state in the findings. The results may be different when perceived realism are examined in different program genres in the future study.

In addition, in order to investigate the influence of preexisting genre schema on flow experience in binge watching, the present study coded the program genres based on classic TV program genres and the genre categorizations on the main video streaming

websites, such as Netflix, Amazon Prime and Hulu. However, TV program genre is a relatively subjective variable, participants would have different methods to classify the TV programs they usually binge watch. Future research can add a question to make participants categorize the program genres first, and then coders refer to the video streaming websites to code again to increase the coding reliability.

CONCLUSION

In summary, the present study presents an important step toward understanding binge watching behavior and defines affective and cognitive engagement within the flow construct during a binging session. Instead of focusing on the negative sides of binge watching, this study looks at the positive outcomes. Positive outcomes correspond with binge watchers' self-consciousness toward their media consumption behaviors. It is helpful for the future studies in binge watching brings new opportunities to investigate broader constructs such as flow state in other new media consumptions.

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